

The invention claimed is:

1. An inflatable module comprising:
 at least two fabric layers, each fabric layer comprising an air
 impermeable, moisture vapor permeable layer, said layers being sealed
 5 together by a seal between said layers to form an inflatable cavity;
 a means for inflating said inflatable cavity incorporated into said
 module; and
 said module further comprising a means for relieving pressure in said
 10 inflatable cavity when said cavity is inflated and subjected to external stresses
 exceeding a predetermined amount.
2. The inflatable module of claim 1, wherein said at least two fabric
 layers comprises fabric having an air impermeable, moisture vapor permeable
 coating thereon.
- 15 3. The inflatable module of claim 1 in which said means for relieving
 pressure is a pressure relief valve.
4. The inflatable module of claim 1 wherein said inflating means also
 functions to release pressure for deflation of the module.
5. The inflatable module of claim 1 comprising a plurality of said
 20 inflatable cavities, each of said cavities incorporating means for inflation and
 means for relieving pressure.
6. The inflatable module of claim 1 in which said laminate has a
 moisture vapor transmission rate of greater than 5000 g/m²/24 hours.
7. The inflatable module of claim 1, wherein said pressure relief valve
 25 relieves pressure when the module is subjected to an external stress creating
 an internal pressure within the inflatable cavity of 0.4 psi or greater.
8. The inflatable module of claim 1, wherein said pressure relief valve
 relieves pressure when the module is subjected to an external stress creating
 an internal pressure within the inflatable cavity of 1.5 psi or greater.
- 30 9. The inflatable module of claim 1, wherein said module comprises a
 breathable insulation insert within a garment.
10. An inflatable module comprising:
 at least two laminates, each laminate comprising an air impermeable, moisture
 vapor permeable layer, said laminates being sealed together by a seal between
 35 said air impermeable, moisture vapor permeable layers to form an inflatable
 cavity;

a means for inflating said inflatable cavity incorporated into said module; and said module further comprising a means for relieving pressure in said inflatable cavity when said cavity is inflated and subjected to external stresses exceeding a predetermined amount.

5 11. The inflatable module of claim 10 in which said means for relieving pressure is a pressure relief valve.

 12. The inflatable module of claim 10 wherein said inflating means also functions to release pressure for deflation of the module.

10 13. The inflatable module of claim 10 comprising a plurality of said inflatable cavities, each of said cavities incorporating means for inflation and means for relieving pressure.

 14. The inflatable module of claim 10 in which said laminate has a moisture vapor transmission rate of greater than 5000 g/m²/24 hours.

15 15. The inflatable module of claim 10, wherein said pressure relief valve relieves pressure when the module is subjected to an external stress creating an internal pressure within the inflatable cavity of 0.4 psi or greater.

 16. The inflatable module of claim 10, wherein said pressure relief valve relieves pressure when the module is subjected to an external stress creating an internal pressure within the inflatable cavity of 1.5 psi or greater.

20 17. The inflatable module of claim 10, wherein said module comprises a breathable insulation insert within a garment.

 18. An inflatable module comprising:
at least two laminates comprising a microporous membrane and an air impermeable, moisture vapor permeable layer, said laminates being sealed
25 together by a seal between said air impermeable, moisture vapor permeable layers to form an inflatable cavity;

 a means for inflating said inflatable cavity incorporated into said module; and

30 said module further comprising a means for relieving pressure in said inflatable cavity when said cavity is inflated and subjected to external stresses exceeding a predetermined amount.

 19. The inflatable module of claim 18 in which said means for relieving pressure is a pressure relief valve.

35 20. The inflatable module of claim 18 wherein said inflating means also functions to release pressure for deflation of the module.

21. The inflatable module of claim 18 comprising a plurality of said inflatable cavities, each of said cavities incorporating means for inflation and means for relieving pressure.

22. The inflatable module of claim 18 in which said laminate has a
5 moisture vapor transmission rate of greater than 5000 g/m²/24 hours.

23. The inflatable module of claim 18, wherein said pressure relief valve relieves pressure when the module is subjected to an external stress creating an internal pressure within the inflatable cavity of 0.4 psi or greater.

24. The inflatable module of claim 18, wherein said pressure relief
10 valve relieves pressure when the module is subjected to an external stress creating an internal pressure within the inflatable cavity of 1.5 psi or greater.

25. The inflatable module of claim 18, wherein said module comprises a breathable insulation insert within a garment.

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